



Binghamton-Johnson City  
JOINT SEWAGE BOARD



Eugene Hulbert, Sr.  
Luke Day  
Edward Crumb

Kenneth E. Kinsman  
Annette Testani  
John Chauncey

October 29, 2010

(via U.S. Mail, e-mail to <[R3\\_ChesapeakeBay\\_TMDL@epa.gov](mailto:R3_ChesapeakeBay_TMDL@epa.gov)>, and upload to <[www.regulations.gov](http://www.regulations.gov)>)

U.S. Environmental Protection Agency  
Region III (Mailcode: 3WP00)  
1650 Arch Street  
Philadelphia, Pennsylvania 19103-2029

U.S. Environmental Protection Agency  
Region III (Mailcode: 3WP30)  
1650 Arch Street  
Philadelphia, Pennsylvania 19103-2029

ATTN: Jon M. Capacasa, Director  
Water Protection Division

ATTN: Jennifer Sincock, Environmental Scientist  
Water Protection Division

RE: Docket ID No. EPA-R03-OW-2010-0736

Requests for Withdrawal of Draft Total Maximum Daily Load for the Chesapeake Bay, and/or Provision of *Scenario Builder* Program Source Code and Modeling Scenario Input/Output Data, and Extension of Time for Submission of Written Comments regarding the Draft Bay TMDL

Dear Sir and Madam:

This letter is written with respect to the draft Total Maximum Daily Load for the Chesapeake Bay ("TMDL") posted September 24, 2010, the corrected Executive Summary also posted September 24, 2010, and Notice of Availability published in the Federal Register September 22, 2010 [75 Fed. Reg. 57,776 (Sept. 22, 2010)]. Currently, all comments must be received by the Environmental Protection Agency ("EPA") no later than November 8, 2010, thereby providing only a 45-calendar-day comment period.

We believe that the TMDL is not approvable in the form presently posted. Additional information and documentation are required in order to formulate specific, meaningful comments, and additional time is required.

Therefore, as described below, we respectfully request [i] that the TMDL be withdrawn immediately due to both its incomplete status and its inaccurate posting, [ii] that the *Scenario Builder* program source code and all other modeling programs with corresponding input/output data decks (collectively, the "Programs") be made publicly available and posted to the docket, and [iii] that the public comment period or, alternatively, our time to submit written comments, be extended 120 calendar days from the posting/provision of the Programs or from September 24, 2010, whichever is first to occur.

**Statement of Interest**

Together with the Facilities' Owners (the City of Binghamton and Village of Johnson City), our Board co-holds

Catherine P. Aingworth, Superintendent  
Binghamton-Johnson City Joint Sewage Treatment Facilities  
4480 Old Vestal Road, Vestal, New York 13850  
Phone: 607-729-2975 Fax: 607-729-0110  
Email: [bjcwwtp@stny.rr.com](mailto:bjcwwtp@stny.rr.com)

RE: Docket ID No. EPA-R03-OW-2010-0736

Requests for Withdrawal of Draft Total Maximum Daily Load for the Chesapeake Bay, and/or Provision of *Scenario Builder* Program Source Code and Modeling Scenario Input/Output Data, and Extension of Time for Submission of Written Comments regarding the Draft Bay TMDL

State Pollution Discharge Elimination System Permit NY-002-4414 (the “Permit”) for the Binghamton-Johnson City Joint Sewage Treatment Facilities (the “Facilities”) located in Vestal, New York. An excerpt of the current Permit, as modified March 6, 2008, is enclosed for your ready reference. Our Facilities have been designed to accept and provide treatment at up to a 60 million gallons per day (“MGD”) peak 24-hour influent flow rate, and the Permit assigns us a 12-month rolling average 35 MGD maximum flow limit. Historically, our Facilities treat and discharge into the Susquehanna River from our designated outfall point in the annual average range of 17.4 – 23.8 MGD in furtherance of the public health and environmental protection needs of those using the 26,517 sewer connections within our 28.6 square mile service area encompassing 11 municipal or governmental districts which cover four [4%] percent of Broome County’s total land mass. Our Facilities are the largest of the 28 existing “significant” wastewater plants (as well as the largest of the total 55 wastewater plants) in the New York State portion of the Chesapeake Bay (“Bay”) watershed and, while making significant contributions to the well-being of the Bay watershed, stand likely to be both greatly and adversely impacted by implementation of the TMDL. Further, according to the New York State Environmental Facilities Corporation, through May 1, 2010 the Facilities’ Owners have expended \$66,205,965.92 on a series of continuing “Phase III Improvements” to our Facilities, including addition of processes for enhanced nutrient removal such as denitrification – for which the EPA also provided a \$4.35 million grant – with a goal of achieving a design “final effluent” maximum concentration of 6 mg/L Total Nitrogen (“TN”) at a maximum monthly flow rate of 35 MGD.

Our Facilities are mis-identified in the TMDL as the “Binghamton-Johnson City Joint Borough” wastewater treatment plant (“WWTP”) and, beginning in Section 4, are mis-described as having a 20 MGD “design flow” upon which the wasteload allocation (“WLA”) proposed in the TMDL is based and, we suspect, EPA modeling – including the *Scenario Builder* program data input – is founded. Information available to us also suggests that, within its Bay watershed modeling programs, the EPA has assigned our Facilities a 59.14% Total Nitrogen (“TN”) Delivery Coefficient and a 41.24% Total Phosphorus (“TP”) Delivery Coefficient whereas, for example, the Village of Endicott WWTP (issued SPDES Permit NY-002-7669) – which is approximately 9.5 nautical miles downstream from our outfall and, thus, *closer* to the Bay than we are – is believed to have been assigned a lower 54.36% TN Delivery Coefficient and a lower 39.35% TP Delivery Coefficient.

## I.

### **The EPA Must Provide the Public with All Information Forming the Basis for a TMDL**

It appears to us that the EPA has rushed the development of this TMDL and has applied modeling tools that were originally designed for continued implementation of a voluntary, cooperative program. The TMDL documents were posted piecemeal (on <[www.regulations.gov](http://www.regulations.gov)>) and contain numerous typographic errors and missing references. A corrected Executive Summary was posted shortly thereafter. Even the EPA did not have sufficient time to ensure that these errors and omissions were addressed before the public comment period began. We do not believe that the Programs have been sufficiently tested and verified for application in a TMDL (particularly the new *Scenario Builder* modeling program) and for subsequent implementation. Also, the *Scenario Builder* modeling program should be subjected to peer review. There are known errors and



RE: Docket ID No. EPA-R03-OW-2010-0736

Requests for Withdrawal of Draft Total Maximum Daily Load for the Chesapeake Bay, and/or Provision of *Scenario Builder* Program Source Code and Modeling Scenario Input/Output Data, and Extension of Time for Submission of Written Comments regarding the Draft Bay TMDL

shortcomings in the *Chesapeake Bay Watershed Model* including, among others, inaccuracies regarding nutrient application and management as well as suburban land characteristics. See, pp. 2-3 of EPA Region III Administrator Shawn Garvin's letter to the Chesapeake Bay Principals' Staff Committee (highlighted copy attached) outlining plans to update the model next year to address these flaws, with the potential (in reality, the likelihood) of corresponding amendments to the TMDL. See also, the June 18, 2010 EPA news release at <http://yosemite.epa.gov/opa/admpress.nsf/90829d899627a1d98525735900400c2b/3fdbaf849578a4685257746006dac15!OpenDocument>, penultimate paragraph. The underlying basis for the TMDL is not yet complete, thereby clearly indicating that the TMDL itself is not yet complete, so plainly the TMDL is not approvable in its present form. Accordingly, we believe that EPA should immediately withdraw the TMDL, and we so request.

If implementation of the TMDL and those Bay-jurisdiction Watershed Implementation Plans ("WIPs") that the EPA may find acceptable is going to be successful, it is important that the jurisdictions and affected stakeholders be given the opportunity to become fully-informed, to thoughtfully review, and credibly comment on the TMDL, the WIPs, the *Scenario Builder*, and other underlying tools (in particular, the *Chesapeake Bay Watershed Model*) in a final form. Generally, "implementation plans" are written after a TMDL is finalized. This is so all components of the TMDL are considered and implementation can be carried-out in a coherent manner. In this TMDL promulgation process, however, the EPA required the jurisdictions to draft their WIPs before the TMDL was even publicly available. Not surprisingly, after the draft WIPs were submitted, the EPA stated that many of them were significantly flawed, in the agency's view. If, as the EPA asserts, many of the draft WIPs *are* significantly flawed, this raises serious questions about the efficacy and viability of WIPs as tools to fulfill the TMDL. New York State has not yet even begun a public comment process on its draft WIP. See, <http://www.dec.ny.gov/lands/33279.html> stating, "In the near future, the DEC is going to start the public comment period for the New York Draft Phase I Watershed Implementation Plan." Until the TMDL, underlying documentation and modeling programs upon which it is based are ready to be reviewed in a final form, drafting WIPs is tantamount to aiming at a "moving target". The denitrification upgrade to our Facilities was designed to achieve a maximum 6 mg/L effluent TN, but the draft backstop allocations assigned to New York in Section 8 of the TMDL will require compliance with a 3 mg/L effluent TN limit by New York WWTPs, so it appears that substantial economic waste will have resulted from the upgrade of our Facilities, albeit undertaken in an effort to "do the right thing" for the Bay watershed, but designed and built to what the EPA now regards as "the wrong standard" according to the TMDL. Even in better fiscal times, few (if any) could afford not to "do it right the first time", so it is absolutely crucial that the TMDL and all underlying documentation and modeling first be complete in a final form before made public for review and comment so the "end limits" are fixed.

Our Board's ability to provide thoughtful, meaningful comments on the TMDL, as well as that of the public we serve, necessitates access to all of the information and assumptions the EPA used in its modeling calculations forming the basis for the TMDL in order to specifically cite the locations of the above-identified errors, as well as data or programming that resulted in such errors, and propose appropriate corrections. Further, as discussed in detail below (in Section II), adequate time to review and evaluate that information is required.

RE: Docket ID No. EPA-R03-OW-2010-0736

Requests for Withdrawal of Draft Total Maximum Daily Load for the Chesapeake Bay, and/or Provision of *Scenario Builder* Program Source Code and Modeling Scenario Input/Output Data, and Extension of Time for Submission of Written Comments regarding the Draft Bay TMDL

The EPA's water quality planning, management and implementation regulations mandate that public access and opportunity to review this essential information must be provided. Specifically, the regulations for establishing TMDLs require that the "[c]alculations to establish TMDLs shall be subject to public review as defined in the State [Continuing Planning Processes]." *See*, 40 C.F.R. § 130.7(c)(1)(ii).

As we understand it, the *Scenario Builder* modeling program contains or performs many calculations that the EPA has used to develop the TMDL. Thus, the EPA must make available for public review all of the source code, the scenario input data that were used, and scenario output results obtained from the *Scenario Builder* modeling program, which then provides inputs to the *Chesapeake Bay Watershed Model* program. The EPA has stated that it is relying on these inputs and outputs to determine the conditions and assumptions under which the *Watershed Model* will predict that water quality standards will be met. These assumptions, though unidentified, are incorporated into the TMDL. *See*, TMDL Section 8.3.2 and Appendix H. Despite its significance, and unlike the draft *Chesapeake Bay Watershed Model*, the *Scenario Builder* code is not even posted with the TMDL documents or otherwise available to the public. In addition, based on statements made during the EPA-hosted public meetings on October 26, 2010 (in Elmira, New York) and October 27, 2010 (in Binghamton, New York), the EPA has not provided the *Scenario Builder* inputs and outputs to watershed jurisdictions such as New York, nor is there a reference or link to this information in the TMDL. The EPA's Chesapeake Bay Program Office has posted only a "preliminary working draft of the Phase 5 model" with the disclaimer: "Users of this draft information are warned that this information is preliminary, subject to change, and unsubstantiated by full and final reviews." *See*, <[http://www.chesapeakebay.net/model\\_phase5.aspx?menuitem=26169](http://www.chesapeakebay.net/model_phase5.aspx?menuitem=26169)>. *See also*, <<http://ches.communitymodeling.org/models/CBPhase5/index.php>> stating only that "Scenario Data" and "Phase 5 Scenario Results" are "Coming Soon". If stakeholders and the public do not have access to these baseline programs, datasets, and results, they are unable to provide meaningful, fully-informed comments.

Because the TMDL is not complete, nor has all of the information upon which the TMDL is based been identified, publicly posted, or made available for public review, we respectfully request that the EPA immediately withdraw the TMDL. Alternatively, we request that the EPA immediately make the scenario data, scenario results, and *Scenario Builder* program code publicly available as required by 40 C.F.R. § 130.7(c)(1)(ii) and, correspondingly, extend the public comment period or, alternatively, our time to submit written comments, by 120 days from the date this information/data is released to our Board and/or the public we serve in order to ensure that all the relevant information used to establish the TMDL is fully available and that our Board and the public we serve will have sufficient time to review all pertinent data and meaningfully comment on the TMDL.

## II.

### **A 45-Day Comment Period Is Not Sufficient to Afford an Adequate Opportunity to Review the Numerous and Complex TMDL Documents and Formulate Informed Comments**

As the EPA acknowledges, the "Chesapeake Bay TMDL is the largest, most complex TMDL in the country, covering a 64,000-square-mile area in seven jurisdictions." *See*, TMDL, at pp. 2-7. Additionally, the EPA



RE: Docket ID No. EPA-R03-OW-2010-0736

Requests for Withdrawal of Draft Total Maximum Daily Load for the Chesapeake Bay, and/or  
Provision of *Scenario Builder* Program Source Code and Modeling Scenario Input/Output Data,  
and Extension of Time for Submission of Written Comments regarding the Draft Bay TMDL

states that the Bay TMDL will be used as a model and set a precedent for the nation as the “standard” to be met for future nutrient reduction programs and TMDLs. Because the TMDL touches on many policy and legal issues, careful consideration and research are required before informed, meaningful comments and suggested changes can be developed and submitted. Due care is also necessary so as to avoid unintended consequences. A TMDL that cannot meet its intended goals serves no one. Allowing sufficient opportunity for the public to participate in the rulemaking process by providing input on the actions that can be taken to meet the goals, improve effectiveness, and lower the costs of the rule will better ensure that the Bay TMDL is not only practical and effective, but maximizes the chances that it will be properly and successfully implemented. Providing adequate time for this vital and necessary input thus affords substantial benefits to both the EPA and the public.

The Bay TMDL includes proposals for two separate sets of load allocations and wasteload allocations for three pollutants in 92 water body segments (one set to meet current water quality standards and one set to meet proposed water quality standards that may or may not be approved by the time the TMDL is issued). In essence, the Bay TMDL consists of 552 separate TMDLs (6 TMDLs x 92 segments). The TMDL includes detailed implementation instructions directed at the seven watershed jurisdictions. Further, in addition to the TMDL “main” document – which consists of 365 pages – and voluminous appendices (the 22 appendices themselves add some 1,629 pages), numerous technical analyses and modeling information referenced in the TMDL each add to the range of separate documents and overall complexity of the information that must be reviewed in order to provide informed, thoughtful, meaningful, and credible comments. Appendix B alone – a list of documents which support or underlie the TMDL – spans 16 pages. All of those documents should be analyzed and understood in order to submit fully-informed, well-considered comments.

Despite acknowledgement that the TMDL is the most complex ever attempted, the EPA is presently allowing a mere 45 calendar days for public comment. Our Board believes that 45 days is insufficient under the *Administrative Procedure Act* (“APA”) to provide for meaningful, informed public comment on the Bay TMDL by any person or entity. Therefore, we request a 120-day comment period extension beginning on the date that the EPA makes available for public review the inputs, outputs as well as the code for the *Scenario Builder* program.

Although the APA does not specify a minimum time period for comment on a proposed rule, Executive Order No. 12866 provides that most rulemakings “should include a comment period of not less than 60 days.”<sup>1</sup>

Likewise, for most TMDLs, both the EPA and the states regularly provide a minimum of 60-90 days for public input. For example, one TMDL that affected an area nearly as large and had complexities like the Bay TMDL was the Northeast Regional Mercury TMDL, covering all of the New England States and part of New York. The Mercury TMDL report was 113 pages long. See, <<http://www.dec.ny.gov/chemical/31304.html>>. In that TMDL, the EPA was involved – as mandated by the *Clean Water Act* – in the review and approval of a regional TMDL sponsored by several states. Each state issued the TMDL and, including extensions, provided at least a

---

<sup>1</sup> - Exec. Order 12866, 58 Fed. Reg. 51,735 (Sept. 30, 1993).

RE: Docket ID No. EPA-R03-OW-2010-0736

Requests for Withdrawal of Draft Total Maximum Daily Load for the Chesapeake Bay, and/or Provision of *Scenario Builder* Program Source Code and Modeling Scenario Input/Output Data, and Extension of Time for Submission of Written Comments regarding the Draft Bay TMDL

59-day public comment period. Four and one-half months were spent responding to comments, and the EPA took close to two months to review/approve. This summer, EPA Region III extended to 51 days (from 30) the comment period for the 135-page draft TMDL for Accotink Creek in Virginia, a single-pollutant TMDL to reduce sediment (in comparison to the 92 segments, or 552 individual TMDLs, in the Bay TMDL). See, <[http://www.epa.gov/reg3wapd/tmdl/VA\\_TMDLs/AccotinkCreek/Accotink-Creek-TMDL6-30-2010DRAFT.pdf](http://www.epa.gov/reg3wapd/tmdl/VA_TMDLs/AccotinkCreek/Accotink-Creek-TMDL6-30-2010DRAFT.pdf)>.

Based on past practice of both the EPA and other federal regulatory agencies, we cannot see how a 45-day comment period is sufficient or appropriate in this case. We recognize that the EPA has entered into some voluntary settlement agreements and consent orders regarding the Bay; however, as discussed in detail below (in Section III), we do not believe this should be used by the EPA as a basis for depriving stakeholders and the public of a reasonable comment opportunity appropriate in length.

Moreover, on occasions when the EPA has initially offered insufficient time to review similarly complex and expansive rulemakings, the agency has recognized its mistake, extended the comment period, and issued such complex rulemakings only after due time for consideration of the comments received. For example, several years ago the EPA proposed 80 TMDLs in Louisiana and originally offered the public only 30 days for review and comment.<sup>2</sup> Not surprisingly, the EPA received several requests to extend the comment period, so the EPA agreed to accept comments for an additional 60 days.<sup>3</sup> After reviewing the comments submitted by the public and stakeholders who, as a result of the extension, had 90 days to review the proposal and supporting data, the EPA thereafter finalized the 80 TMDLs some six months later.<sup>4</sup>

### III.

#### **The EPA Has Full Authority to Revise the TMDL Timeline and Afford a Longer Comment Period**

The EPA repeatedly points to the TMDL schedule included in its May 10, 2010 Settlement Agreement with former Maryland State Senator C. Bernard Fowler, the Chesapeake Bay Foundation, the Maryland and Virginia Watermen's Associations, and others in *Fowler v. EPA* – which calls for the completion of the Bay TMDL by December 31, 2010 – as “the reason” for a truncated public review and comment period.

Nevertheless, the EPA has retained unto itself full authority to revise the schedule and timeline in order to allow for an adequate public comment period. December 31<sup>st</sup> is but an arbitrary date in the continuum of time. There is *no* Presidential directive or federal legislation mandating a December 31<sup>st</sup> completion date for the TMDL.

---

<sup>2</sup> - 71 Fed. Reg. 41,217 (July 20, 2006), setting August 21, 2006 as the original deadline for public comment.

<sup>3</sup> - 71 Fed. Reg. 59,504 (Oct. 10, 2006), agreeing to accept public comment until October 20, 2006, review the comments, and revise or modify the TMDLs as appropriate.

<sup>4</sup> - 72 Fed. Reg. 19,703 (Apr. 19, 2007).



RE: Docket ID No. EPA-R03-OW-2010-0736

Requests for Withdrawal of Draft Total Maximum Daily Load for the Chesapeake Bay, and/or Provision of *Scenario Builder* Program Source Code and Modeling Scenario Input/Output Data, and Extension of Time for Submission of Written Comments regarding the Draft Bay TMDL

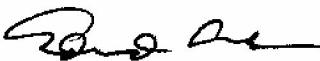
There is no scientific reason why December 31<sup>st</sup> *must* be the completion date for what then would initiate a 15-year environmental restoration process. There have been numerous “slippages” of dates over the past decade – especially with respect to milestones set by the EPA for the EPA to release various components and updates of the *Chesapeake Bay Watershed Model* – for the convenience of the EPA. Indeed, because the current deadline is nothing more than an agreed-upon date in a voluntary settlement agreement (*not* a court-ordered deadline), the EPA *can* renegotiate.<sup>5</sup> In fact, the Settlement Agreement expressly grants the EPA flexibility to extend the December 31<sup>st</sup> milestone and certainly does not limit or modify EPA's discretion to allow the public sufficient time to review and comment on the 92-segment Bay TMDL.<sup>6</sup> In our own experience, we are well aware that even consent orders and compliance schedules can be renegotiated to take into account changing circumstances as well as to best serve the goal of “getting it right” even if it takes some more time to do so.

The EPA should not short-circuit the interests and rights of all stakeholders and the public throughout the Bay watershed jurisdictions by refusing to extend the public comment period, especially when it has reserved unto itself the full authority to afford adequate time in the *Fowler* Settlement Agreement and especially under circumstances in which all documentation and calculations underlying the TMDL have not yet been made public.

### Conclusion

We trust that the EPA is interested in both [i] ensuring that the public has access to all of the relevant information and documentation as well as [ii] receiving fully-informed, thoughtful, thorough, specific, and credible comments on this complex draft TMDL and, as such, will grant our requests. We appreciate your review and consideration of these requests and ask that you notify us of your decision[s]/actions[s] on them within the next five (5) business days. Please contact me if you wish to discuss our requests in further detail.

Respectfully submitted,



Edward Crumb,  
Chairman

enclosures: pp. 9-25 – EXCERPT of SPDES Permit NY-002-4414, as modified March 6, 2008  
pp. 26-29 – June 11, 2010 Garvin Letter to Principals' Staff Committee

---

<sup>5</sup> - *Fowler v. EPA* Settlement Agreement, Section IV.A. (p. 22): "The parties may modify any deadline or other term of this agreement in writing." See, <<http://www.cbf.org/Document.Doc?id=512>>, Civil Action No.: 1:09-CV-00005-CKK (D. D.C.).

<sup>6</sup> - *Fowler v. EPA* Settlement Agreement, Sections VI. A., D., & E. (pp. 24-25): provides that the Settlement Agreement does not limit or modify EPA's discretion under the APA, or require EPA to violate the APA, and allows EPA to delay deadlines under circumstances “outside the reasonable control of EPA” upon notice to the plaintiffs – without requiring plaintiffs’ prior consent).

RE: Docket ID No. EPA-R03-OW-2010-0736

Requests for Withdrawal of Draft Total Maximum Daily Load for the Chesapeake Bay, and/or  
Provision of *Scenario Builder* Program Source Code and Modeling Scenario Input/Output Data,  
and Extension of Time for Submission of Written Comments regarding the Draft Bay TMDL

cc: Hon. Charles E. Schumer, U.S. Senator, New York  
Hon. Kirsten E. Gillibrand, U.S. Senator, New York  
Hon. Maurice D. Hinchey, Representative, 22<sup>nd</sup> Congressional District of New York  
Hon. Michael Arcuri, Representative, 24<sup>th</sup> Congressional District of New York  
Hon. Thomas W. Libous, NYS Senator, 52<sup>nd</sup> District  
Hon. Donna A. Lupardo, NYS Assemblywoman, 126<sup>th</sup> District  
Ronald A. Entringer, NYS-DEC Division of Water (*via e-mail only*)  
Peter B. Freehafer, NYS-DEC Chesapeake Bay Program Coordinator (*via e-mail only*)  
Kenneth P. Lynch, Regional Director, NYS-DEC Region 7 (*via e-mail only*)  
Sandra Lizlovs, P.E., Environmental Engineer II, NYS-DEC Region 7, Division of Water (*via e-mail only*)  
Weixing Zhu, Ph.D., Director, Center for Integrated Watershed Studies, Binghamton Univ. (*via e-mail only*)  
James Curatalo, Watershed Coordinator, Upper Susquehanna Coalition (*via e-mail only*)  
Hon. Barbara J. Fiala, Broome County Executive (*via e-mail only*)  
Charles H. McElwee, Executive Director, Broome Co. Soil & Water Conservation District (*via e-mail only*)  
Hon. Matthew T. Ryan, Mayor, City of Binghamton (*via e-mail only*)  
Hon. Dennis F. Hannon, Mayor, Village of Johnson City (*via e-mail only*)  
Binghamton City Council (*via e-mail only*)  
Johnson City Village Board (*via e-mail only*)  
Angela B. Fagerstrom, Binghamton City Clerk (*via e-mail only*)  
Thomas Johnson, Johnson City Clerk/Treasurer (*via e-mail only*)  
Sewage Board members (*via e-mail only*)  
Catherine P. Aingworth, Superintendent  
Michele Cuevas, Board Secretary  
John Perticone, Esq., Board Co-Counsel (*via e-mail only*)  
Alfred Paniccia, Jr., Esq., Board Co-Counsel (*via e-mail only*)





NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION  
**State Pollutant Discharge Elimination System (SPDES)**  
**DISCHARGE PERMIT**  
Special Conditions

EXCERPT

First 3 99

Industrial Code: 4952  
Discharge Class (CL): 05  
Toxic Class (TX): T  
Major Drainage Basin: 06  
Sub Drainage Basin: 03  
Water Index Number: SR  
Compact Area: SRBC

SPDES Number: NY- 0024414  
DEC Number: 7-0348-00007/00001  
Effective Date (EDP): 06/01/07  
Expiration Date (ExDP): 05/31/12  
Modification Dates: 6/14/07, 7/23/07, 12/4/07, 3/6/08

This SPDES permit is issued in compliance with Title 8 of Article 17 of the Environmental Conservation Law of New York State and in compliance with the Clean Water Act, as amended, (33 U.S.C. §1251 et.seq.)(hereinafter referred to as "the Act").

**CO-PERMITTEE NAMES AND ADDRESSES - see page 2 for addresses and contact information**

Names: Binghamton Johnson City Joint Sewage Board, City of Binghamton, Village of Johnson City Attention:

Street:

City:

State:

Zip Code:

is authorized to discharge from the facility described below:

**FACILITY NAME AND ADDRESS**

Name: Binghamton-Johnson City Joint Sewage Treatment Plant

Location (C,T,V): Vestal (T)

County: Broome

Facility Address: Old Vestal Road

City: Vestal

State: NY

Zip Code: 13850

NYTM -E: 420.092

NYTM - N: 4661.129

From Outfall No.: 001 at Latitude: 42 ° 05 ' 53 " & Longitude: 75 ° 57 ' 44 "

into receiving waters known as: Susquehanna River

Class: A

and; (list other Outfalls, Receiving Waters & Water Classifications)

in accordance with the effluent limitations, monitoring requirements and other conditions set forth in 6 NYCRR 750-1.2(a) and 750-2:

**DISCHARGE MONITORING REPORT (DMR) MAILING ADDRESS**

Mailing Name: Binghamton-Johnson City Joint Sewage Treatment Plant

Street: 4480 Old Vestal Road

City: Vestal

State: NY

Zip Code: 13850

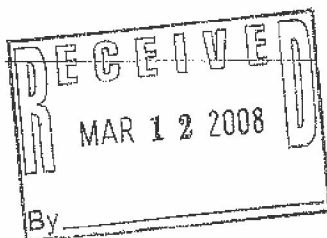
Responsible Official or Agent: Superintendent

Phone: (607) 729-2975

This permit and the authorization to discharge shall expire on midnight of the expiration date shown above and the permittee shall not discharge after the expiration date unless this permit has been renewed, or extended pursuant to law. To be authorized to discharge beyond the expiration date, the permittee shall apply for permit renewal not less than 180 days prior to the expiration date shown above.

**DISTRIBUTION:**

Bureau of Water Permits  
Region 7 Water Engineer  
Permit Coordinator - BWP  
USEPA - Region II



Permit Administrator: Michael Barylski	
Address: NYS Department of Environmental Conservation 1285 Fisher Ave. Cortland, NY 13045	
Signature: <i>Michael B. Barylski</i>	Date: 03/06/08

AR0030123

**CO - PERMITTEE NAMES AND ADDRESSES****PERMITTEE NAME AND ADDRESS**

Name: **Binghamton-Johnson City Joint Sewage Board** Attention: **Superintendent**  
Street: **4480 Old Vestal Road**  
City: **Vestal** State: **NY** Zip Code: **13850**  
Phone: **607-729-2975**

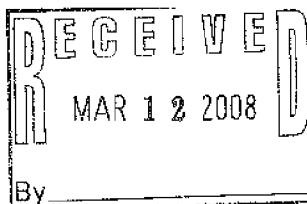
**PERMITTEE NAME AND ADDRESS**

Name: **City of Binghamton** Attention: **Mayor**  
Street: **City Hall, 38 Hawley Street**  
City: **Binghamton** State: **NY** Zip Code: **13901**  
Phone: **607-772-7001**

**PERMITTEE NAME AND ADDRESS**

Name: **Village of Johnson City** Attention: **Mayor**  
Street: **Johnson City Village Office, 243 Main Street**  
City: **Johnson City** State: **NY** Zip Code: **13790**  
Phone: **607-798-7861**





## PERMIT LIMITS, LEVELS AND MONITORING DEFINITIONS

OUTFALL	WASTEWATER TYPE		RECEIVING WATER	EFFECTIVE	EXPIRING	
	This cell describes the type of wastewater authorized for discharge. Examples include process or sanitary wastewater, storm water, non-contact cooling water.		This cell lists classified waters of the state to which the listed outfall discharges.	The date this page starts in effect. (e.g. EDP or EDPM)	The date this page is no longer in effect. (e.g. ExDP)	
PARAMETER	MINIMUM	MAXIMUM	UNITS	SAMPLE FREQ.	SAMPLE TYPE	
e.g. pH, TRC, Temperature, D.O.	The minimum level that must be maintained at all instants in time.	The maximum level that may not be exceeded at any instant in time.	SU, °F, mg/l, etc.			
PARA-METER	EFFLUENT LIMIT	PRACTICAL QUANTITATION LIMIT (PQL)	ACTION LEVEL	UNITS	SAMPLE FREQUENCY	SAMPLE TYPE
	Limit types are defined below in Note 1. The effluent limit is developed based on the more stringent of technology-based limits, required under the Clean Water Act, or New York State water quality standards. The limit has been derived based on existing assumptions and rules. These assumptions include receiving water hardness, pH and temperature; rates of this and other discharges to the receiving stream; etc. If assumptions or rules change the limit may, after due process and modification of this permit, change.	For the purposes of compliance assessment, the analytical method specified in the permit shall be used to monitor the amount of the pollutant in the outfall to this level, provided that the laboratory analyst has complied with the specified quality assurance/quality control procedures in the relevant method. Monitoring results that are lower than this level must be reported, but shall not be used to determine compliance with the calculated limit. This PQL can be neither lowered nor raised without a modification of this permit.	Type I or Type II Action Levels are monitoring requirements, as defined below in Note 2, that trigger additional monitoring and permit review when exceeded.	This can include units of flow, pH, mass, Temperature, concentration. Examples include µg/l, lbs/d, etc.	Examples include Daily, 3/week, weekly, 2/month, monthly, quarterly, 2/yr and yearly.	Examples include grab, 24 hour composite and 3 grab samples collected over a 6 hour period.

**Note 1: DAILY DISCHARGE:** The discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for the purposes of sampling. For pollutants expressed in units of mass, the 'daily discharge' is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurement, the 'daily discharge' is calculated as the average measurement of the pollutant over the day.

**DAILY MAX.:** The highest allowable daily discharge. **DAILY MIN.:** The lowest allowable daily discharge.

**MONTHLY AVG:** The highest allowable average of daily discharges over a calendar month, calculated as the sum of each of the daily discharges measured during a calendar month divided by the number of daily discharges measured during that month.

**7 DAY ARITHMETIC MEAN (7 day average):** The highest allowable average of daily discharges over a calendar week.

**30 DAY GEOMETRIC MEAN:** The highest allowable geometric mean of daily discharges over a calendar month, calculated as the antilog of : the sum of the log of each of the daily discharges measured during a calendar month divided by the number of daily discharges measured during that month.

**7 DAY GEOMETRIC MEAN:** The highest allowable geometric mean of daily discharges over a calendar week.

**RANGE:** The minimum and maximum instantaneous measurements for the reporting period must remain between the two values shown.

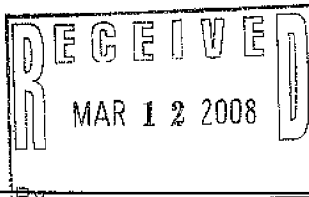
**Note 2: ACTION LEVELS:** Routine Action Level monitoring results, if not provided for on the Discharge Monitoring Report (DMR) form, shall be appended to the DMR for the period during which the sampling was conducted. If the additional monitoring requirement is triggered as noted below, the permittee shall undertake a short-term, high-intensity monitoring program for the parameter(s). Samples identical to those required for routine monitoring purposes shall be taken on each of at least three consecutive operating and discharging days and analyzed. Results shall be expressed in terms of both concentration and mass, and shall be submitted no later than the end of the third month following the month when the additional monitoring requirement was triggered. Results may be appended to the DMR or transmitted under separate cover to the same address. If levels higher than the Action Levels are confirmed, the permit may be reopened by the Department for consideration of revised Action Levels or effluent limits.

The permittee is not authorized to discharge any of the listed parameters at levels which may cause or contribute to a violation of water quality standards. **TYPE I:** The additional monitoring requirement is triggered upon receipt by the permittee of any monitoring results in excess of the stated Action Level. **TYPE II:** The additional monitoring requirement is triggered upon receipt by the permittee of any monitoring results that show the stated action level exceeded for four of six consecutive samples, or for two of six consecutive samples by 20 % or more, or for any one sample by 50 % or more.

## INTERIM PERMIT LIMITS, LEVELS AND MONITORING

OUTFALL No.	LIMITATIONS APPLY:			RECEIVING WATER			EFFECTIVE		EXPIRING	
001	[ X ] All Year [ ] Seasonal from _____ to _____			Susquehanna River			See footnote 10			
PARAMETER	EFFLUENT LIMIT					MONITORING REQUIREMENTS				FN
	Type	Limit	Units	Limit	Units	Sample Frequency	Sample Type	Location		
								Inf.	Eff.	
Flow	12 month rolling avg	35	MGD			Continuous	Recorder	X		
CBOD <sub>5</sub>	Monthly average	18	mg/l	5254	lbs/d	1/day	24-hr. Comp.	X	X	
CBOD <sub>5</sub>	7 day average	27	mg/l	7881	lbs/d	1/day	24-hr. Comp.	X	X	1
CBOD <sub>5</sub>	Monthly average	25	mg/l	7298	lbs/d	1/day	24-hr. Comp.	X	X	2
CBOD <sub>5</sub>	7 day average	40	mg/l	Monitor	lbs/d	1/day	24-hr. Comp.	X	X	2
CBOD <sub>5</sub>	Daily Max	40	mg/l	Monitor	lbs/d	1/day	24-hr. Comp.	X	X	3
Solids, Suspended	Monthly average	20	mg/l	5838	lbs/d	1/day	24-hr. Comp.	X	X	1
Solids, Suspended	7 day average	30	mg/l	8757	lbs/d	1/day	24-hr. Comp.	X	X	1
Solids, Suspended	Monthly average	30	mg/l			1/day	24-hr. Comp.	X	X	2
Solids, Suspended	7 day average	45	mg/l			1/day	24-hr. Comp.	X	X	2
Solids, Suspended	Daily Max	45	mg/l			1/day	24-hr. Comp.	X	X	3
Solids, Settleable	Daily Max	0.3	ml/l			6/day	Grab	X	X	
pH	Range	6.0-9.0	SU			Continuous	Recorder	X	X	
Nitrogen, Total	Monthly Average	6	mg/l	Monitor	lbs/d	1/day	24-hr. Comp.	X	X	4,5,6
Nitrogen, Total	12 month rolling avg	Monitor	mg/l	Monitor	lbs/d	1/day	24-hr. Comp.	X	X	5, 6, 10
Ammonia (as NH <sub>3</sub> )	Monthly Average	Monitor	mg/l	2200	lbs/d	1/week	24-hr. Comp.	X	X	4,5,6,7
Ammonia (as NH <sub>3</sub> )	Maximum	Monitor	mg/l	Monitor	lbs/d	1/week	24-hr. Comp.	X	X	8
Nitrogen, TKN (as N)	Daily Maximum	45	mg/l	13700	lbs/d	1/week	24-hr. Comp.	X	X	4
Phosphorus, Total (as P)	Monthly average	Monitor	mg/l	Monitor	lb/d	1/week	24-hr. Comp.	X	X	





PARAMETER	By _____ EFFLUENT LIMIT					MONITORING REQUIREMENTS				FN
	Type	Limit	Units	Limit	Units	Sample Frequency	Sample Type	Location		
								Inf.	Eff.	
Mercury, Total	Daily Maximum	200	ng/l			Monthly	Grab		X	9
Cyanide, Total	Daily Average			10	lbs/d	Monthly	24-hr. Comp.		X	
Iron, Total Recoverable	Daily Average			290	lbs/d	Monthly	24-hr. Comp.		X	
Lead, Total Recoverable	Daily Average			18	lbs/d	Monthly	24-hr. Comp.		X	
Copper, Total Recoverable	Daily Average			20	lbs/d	Monthly	24-hr. Comp.		X	
Temperature	Maximum	Monitor	Deg °C			6/day	Grab	X	X	
Effluent Disinfection required: [ X ] All Year [ ] Seasonal from _____ to _____										
Coliform, Fecal	30/day geometric mean	200	No./ 100 ml			1/day	Grab		X	
Coliform, Fecal	7 day geometric mean	400	No./ 100 ml			1/day	Grab		X	
Chlorine, Total Residual	Daily Max	0.2	mg/l			6/day	Grab		X	

FOOTNOTES:

FN	Flow Range, MGD	Monitoring and Reporting Requirement
1	Up to 35	Monitor and report percent removal of BOD <sub>5</sub> & TSS respectively. Final permit limits for percent removal shall be developed using information generated by the required treatability study as discussed on page 17 of this permit.
2	35 ≤ 49.9	Monitor and report percent removal of BOD <sub>5</sub> & TSS respectively. Final permit limits for percent removal shall be developed using information generated by the required treatability study as discussed on page 17 of this permit.
3	>49.9	Monitor and report percent removal of BOD <sub>5</sub> & TSS respectively. Final permit limits for percent removal shall be developed using information generated by the required treatability study as discussed on page 17 of this permit.
4	Up to 35	Effluent limitation applies when plant flow is 35 MGD or less.
5	35 ≤ 49.9	<u>Monitor only</u>
6	>49.9	<u>Monitor only.</u>
7	Effluent limitation applies during the period of June 1 to October 31.	
8	Effluent limitation applies during the period November 1 to May 31.	
9	According to DEC SPDES permit drafting policy, no substances shall be limited at a level below the practical quantitation limit (PQL). The calculated Water Quality Based Effluent Limit (WQBEL) for total mercury is 0.0009mg/l based on the water quality evaluation for this outfall. The proposed interim permit limit is 200 ng/l until the Department reviews pending the completion of the PMP on page 18 of this permit. The permittee shall use EPA Method 1631 to analyze total mercury and report the results on the Discharge Monitoring Report forms for enforcement compliance purposes.	
10	Effective date of permit: Completion of Plant Performance Testing. Expiration date: 24 months + effective date of the permit. Final permit limits shall be developed using information generated by the required treatability study as discussed on page 17 of this permit.	

## ACTION LEVELS AND MONITORING

PARAMETER	MONITORING ACTION LEVEL		UNITS	SAMPLE FREQUENCY	SAMPLE TYPE	LOCATION	FN
	TYPE I						
	Monthly Avg.	Daily Max.					
Silver, Total Recoverable		1.7	lbs/day	1/month	24-hr comp.	Effluent	
Chloroform, ug/l	Monitor		lbs/day	1/month	Grab	Effluent	
Toluene, ug/l	Monitor		lbs/day	1/month	Grab	Effluent	
1, 4-dichlorobenzene, ug/l	Monitor		lbs/day	1/month	Grab	Effluent	
Ethylbenzene, ug/l	Monitor		lbs/day	1/month	Grab	Effluent	
Antimony, Total	Monitor		lbs/day	1/month	24-hr comp.	Effluent	11
Arsenic, Total	Monitor		lbs/day	1/month	24-hr comp.	Effluent	11
Beryllium, Total	Monitor		lbs/day	1/month	24-hr comp.	Effluent	11
Selenium, Total	Monitor		lbs/day	1/month	24-hr comp.	Effluent	11
Thallium, Total	Monitor		lbs/day	1/month	24-hr comp.	Effluent	11
Methyl Bromide	Monitor		lbs/day	1/month	Grab	Effluent	11
Methyl Chloride	Monitor		lbs/day	1/month	Grab	Effluent	11
Trichloroethylene	Monitor		lbs/day	1/month	Grab	Effluent	11

Footnote:

11. Permittee shall conduct a two year monitoring program for these parameters. Final limits and/or action levels, if necessary, shall be developed by the Department upon completion of the two year monitoring program.

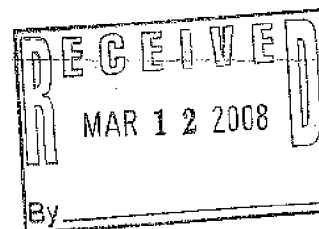
**TOXICITY TESTING PROGRAM, TIER 1 - ACUTE TEST**

The Department has determined that an acute effluent toxicity monitoring program is required. The permittee shall implement the program as follows:

**Effluent Toxicity Monitoring Requirements**

Outfall No.	Effluent Parameters (Units)	Reason for Testing Requirement	Sample Frequency	Sample Type
001	Toxicity (% Effluent)	The possibility of complex or synergistic interactions of chemicals.	Quarterly for a period of one year during calendar years ending in [7] and [2].	24 hr. Composite/static renewal

- a. The effluent toxicity monitoring program shall begin in January of the years noted in the table above. Subsequent modification or renewal of this permit does not reset or revise the deadline(s) set forth in the preceding sentence unless a new deadline is set explicitly by such modification or renewal.
- b. The results of each toxicity test shall be submitted no later than 60 days following the end of each test period. These reports shall be submitted to the NYS DEC Regional Water Engineer at 615 Eric Blvd West, Syracuse, NY 13204-2400 and to the Toxicity Testing Unit, Bureau of Watershed Assessment and Research, 625 Broadway, Albany, NY 12233-3502.
- c. Effluent Toxicity shall mean the toxicity of the effluent in acute static renewal tests specified as Tier 1 testing in *Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms*, Fourth Edition, EPA/600/4-90/027F (1993) or most recent edition (herein referred to as the EPA Acute Manual). Both a vertebrate and invertebrate species shall be used for the tests. Where the outfall being tested discharges to estuarine or ocean waters, the marine organisms shall be tested. Where the outfall being tested discharges to fresh waters, freshwater organisms shall be tested. Dilution water shall be collected according to the EPA Acute Manual. Receiving water shall be used as dilution water unless the Department approves a different source. Effluent sampling and holding shall be done as outlined in the EPA Acute Manual, and should consist of 24 hour composite samples. Any deviation from procedures in the EPA Acute Manual requires prior written approval by the Department.
- d. The 48-hour  $EC_{50}$  and 48-hour  $LC_{50}$  in % Effluent for both a vertebrate and an invertebrate species shall be determined and reported in accordance with the specified frequency. The 48-hour  $EC_{50}$  and 48-hour  $LC_{50}$  in % Effluent shall be compared to the Instream Waste Concentration (IWC) of the effluent calculated based on the daily average effluent flow at the time of the test and the critical flow in Susquehanna River of 315 cubic feet per second (cfs).
- e. Where practicable, monitoring of chemical and physical parameters limited in this permit shall be coordinated so that the resulting analysis is also representative of the sample used for toxicity testing.
- f. Discharges which use chlorination as part of the waste treatment process for disinfection should be dechlorinated prior to toxicity testing or samples shall be taken immediately prior to the chlorination system.
- g. In accordance with NYSDEC guidance, the Department may require the permittee to conduct additional toxicity testing. If such additional testing is necessary, the permittee shall be notified in writing by the NYS DEC Regional Water Engineer. The written notification shall include the reason(s) why such testing is required.





## TOXICITY TESTING PROGRAM, TIER 2 - CHRONIC TEST

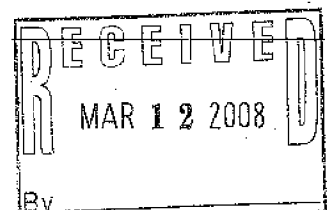
Effluent Toxicity Monitoring Requirements

Outfall No.	Effluent Parameters (Units)	Reason for Testing Requirement	Sample Frequency	Sample Type
001	Toxicity (% Effluent)	The possibility of complex or synergistic interactions of chemicals.	Quarterly for a period of one year during calendar years ending in [7] and [2].	24 hr. Composite/static renewal

- a. The permittee shall implement this effluent toxicity monitoring program beginning in the first month of the first full calendar quarter, i.e. January, April, July, or October, that is within 3 months of written notification from the NYSDEC Regional Water Engineer that chronic toxicity testing is necessary. The written notification will include the reasons why the chronic toxicity testing program is necessary and the sample frequency. The effluent toxicity monitoring program shall begin in January of the years noted in the table above. Subsequent modification or renewal of this permit does not reset or revise the deadline(s) set forth in the preceding sentence unless a new deadline is set explicitly by such modification or renewal.
- b. The results of each toxicity test shall be submitted no later than 60 days following the end of each test period. These reports shall be submitted to the NYS DEC Regional Water Engineer at 615 Erie Blvd West, Syracuse, NY 13204-2400 and to the Toxicity Testing Unit, Bureau of Watershed Assessment and Research, 625 Broadway, Albany, NY 12233-3502.
- c. Effluent toxicity shall mean the toxicity of the effluent in chronic static renewal tests as specified in *Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms*, Third Edition, EPA/600/4-91/002 (1994), the EPA Chronic Manual for Marine Organisms (EPA/600/4-91/003(1994), or the most recent editions (herein referred to as the EPA Chronic Manuals). Both a vertebrate and invertebrate species shall be used for the tests. Where the outfall being tested discharges to estuarine or ocean waters, marine organisms shall be tested. Where the outfall being tested discharges to fresh waters, freshwater organisms shall be tested. Each test run shall be 'bracketed' with a test of pure effluent and a test of effluent diluted sufficiently such that at least one diluted sample shows no toxic effects. Appropriate dilutions between the endpoints shall be tested to allow calculation of the Maximum Allowable Waste Concentration. Dilution water shall be collected according to the EPA Chronic Manuals. Receiving water shall be used as dilution water unless the Department approves a different source. Effluent sampling and holding shall be done as outlined in of the EPA Chronic Manuals. Any deviation from procedures in the EPA Chronic Manuals requires prior written approval by the Department.
- d. The Maximum Allowable Waste Concentration (MAWC) in % Effluent, for both a vertebrate and an invertebrate species, shall be determined and reported. The MAWC in % Effluent shall be compared to the calculated Instream Waste Concentration (IWC) of the effluent. The IWC in % Effluent shall be determined using the daily average effluent flow at the time of sampling and a critical receiving water flow of 315 cubic feet per second for Susquehanna River.
- e. Where practicable, monitoring of chemical and physical parameters limited in this permit shall be coordinated so that the resulting analysis is also representative of the samples used for toxicity testing.
- f. Discharges which use chlorination as part of the waste treatment process for disinfection should be dechlorinated prior to toxicity testing or samples shall be taken immediately prior to the chlorination system.
- g. In accordance with NYSDEC guidance, the Department may require the permittee to conduct additional toxicity testing. If such additional testing is necessary, the permittee shall be notified in writing by the NYS DEC Regional Water Engineer. The written notification shall include the reason(s) why such testing is required.

**TOXICITY REDUCTION EVALUATION COMPLIANCE SCHEDULE**

- (a) In accordance with Department guidance on whole effluent toxicity monitoring and control, the Department will evaluate the results of acute and/or chronic toxicity testing of discharges authorized by this permit. Based on this evaluation, the Department may require the permittee to perform a Toxicity Reduction Evaluation (TRE). Should a TRE be required, the permittee shall be notified in writing by the NYS DEC Regional Water Engineer. The written notification shall include the reasons why the TRE is required.
- b. Within 60 days of the date of the written notification from the NYS DEC Regional Water Engineer in (a), the permittee shall submit an approvable proposal for Toxicity Reduction Evaluation to the Bureau of Watershed Assessment and Research, 625 Broadway, Albany, NY 12233-3502. The TRE proposal shall be directed towards identifying the source of the toxicity, describing procedures to reduce the toxicity to an acceptable level, identifying monitoring parameters suitable for insuring control of the toxicity, and proposing a schedule for completing the TRE.
- (c) Within 14 days of receipt of written approval of the TRE proposal from the DEC Regional Water Engineer, the permittee shall implement the approved TRE proposal in accordance with the approved schedule.
- (d) The completed TRE, including data findings and recommendations for corrective action, permit limits, and proposed self-monitoring requirements shall be submitted to the Bureau of Watershed Assessment and Research at the address noted in (b) on this page. The Department will review the TRE and may modify the permit, in accordance with applicable law & regulation, to incorporate one or more of the following: substance specific numerical limits, toxicity limits, monitoring requirements, and/or a schedule of compliance that will ensure acceptable toxicity levels of the effluent.



## PRETREATMENT PROGRAM IMPLEMENTATION REQUIREMENTS

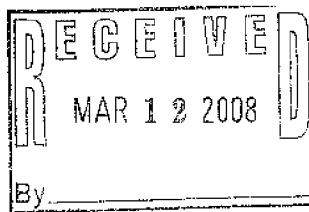
A. DEFINITIONS. Generally, terms used in this Section shall be defined as in the General Pretreatment Regulations (40 CFR Part 403). Specifically, the following definitions apply to terms used in this Section (PRETREATMENT PROGRAM IMPLEMENTATION REQUIREMENTS):

1. Categorical Industrial User (CIU)- an industrial user of the POTW that is subject to Categorical Pretreatment Standards under 40 CFR 403.6 and 40 CFR Chapter I, Subchapter N;
2. Local Limits - General Prohibitions, specific prohibitions and specific limits as set forth in 40 CFR 403.5.
3. The Publicly Owned Treatment Works (the POTW) - as defined by 40 CFR 403.3(o) and that discharges in accordance with this permit.
4. Program Submission(s) - requests for approval or modification of the POTW Pretreatment Program submitted in accordance with 40 CFR 403.11 or 403.18 and approved by letter dated September 20, 1985.
5. Significant Industrial User (SIU) -
  - a. CIUs;
  - b. Except as provided in 40 CFR 403.3(t)(2), any other industrial user that discharges an average of 25,000 gallons per day or more of process wastewater (excluding sanitary, non-contact cooling and boiler blowdown wastewater) to the POTW;
  - c. Except as provided in 40 CFR 403.3(t)(2), any other industrial user that contributes a process wastestream which makes up 5 percent or more of the average dry weather hydraulic or organic capacity of the POTW treatment plant;
  - d. Any other industrial user that the permittee designates as having a reasonable potential for adversely affecting the POTW's operation or for violating a pretreatment standard or requirement.
6. Substances of Concern - Substances identified by the New York State Department of Environmental Conservation Industrial Chemical Survey as substances of concern.

B. IMPLEMENTATION. The permittee shall implement a POTW Pretreatment Program in accordance 40 CFR Part 403 and as set forth in the permittee's approved Program Submission(s). Modifications to this program shall be made in accordance with 40 CFR 403.18. Specific program requirements are as follows:

1. Industrial Survey. To maintain an updated inventory of industrial dischargers to the POTW the permittee shall:
  - a. Identify, locate and list all industrial users who might be subject to the industrial pretreatment program from the pretreatment program submission and any other necessary, appropriate and available sources. This identification and location list will be updated, at a minimum, every five years. As part of this update the permittee shall collect a current and complete New York State Industrial Chemical Survey form (or equivalent) from each SIU.
  - b. Identify the character and volume of pollutants contributed to the POTW by each industrial user identified in B.1.a above that is classified as a SIU.
  - c. Identify, locate and list, from the pretreatment program submission and any other necessary, appropriate and available sources, all significant industrial users of the POTW.
2. Control Mechanisms. To provide adequate notice to and control of industrial users of the POTW the permittee shall:



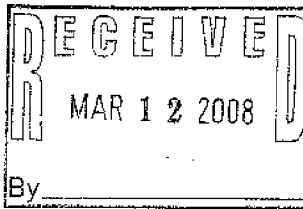


- a. Inform by certified letter, hand delivery courier, overnight mail, or other means which will provide written acknowledgment of delivery, all industrial users identified in B.1.a. above of applicable pretreatment standards and requirements including the requirement to comply with the local sewer use law, regulation or ordinance and any applicable requirements under section 204(b) and 405 of the Federal Clean Water Act and Subtitles C and D of the Resource Conservation and Recovery Act.
  - b. Control through permit or similar means the contribution to the POTW by each SIU to ensure compliance with applicable pretreatment standards and requirements. Permits shall contain limitations, sampling frequency and type, reporting and self-monitoring requirements as described below, requirements that limitations and conditions be complied with by established deadlines, an expiration date not later than five years from the date of permit issuance, a statement of applicable civil and criminal penalties and the requirement to comply with Local Limits and any other requirements in accordance with 40 CFR 403.8(f)(1).
3. Monitoring and Inspection. To provide adequate, ongoing characterization of non-domestic users of the POTW, the permittee shall:
- a. Receive and analyze self-monitoring reports and other notices. The permittee shall require all SIUs to submit self-monitoring reports at least every six months unless the permittee collects all such information required for the report, including flow data.
  - b. The permittee shall adequately inspect each SIU at a minimum frequency of once per year.
  - c. The permittee shall collect and analyze samples from each SIU for all priority pollutants that can reasonably be expected to be detectable at levels greater than the levels found in domestic sewage at a minimum frequency of once per year.
  - d. Require, through permits, each SIU to collect at least one 24 hour, flow proportioned composite (where feasible) effluent sample every six months and analyze each of those samples for all priority pollutants that can reasonably be expected to be detectable in that discharge at levels greater than the levels found in domestic sewage. The permittee may perform the aforementioned monitoring in lieu of the SIU except that the permittee must also perform the compliance monitoring described in 3.c.
4. Enforcement. To assure adequate, equitable enforcement of the industrial pretreatment program the permittee shall:
- a. Investigate instances of noncompliance with pretreatment standards and requirements, as indicated in self-monitoring reports and notices or indicated by analysis, inspection and surveillance activities. Sample taking and analysis and the collection of other information shall be performed with sufficient care to produce evidence admissible in enforcement proceedings or in judicial actions. Enforcement activities shall be conducted in accordance with the permittee's Enforcement Response Plan developed and approved in accordance with 40 CFR Part 403.
  - b. Enforce compliance with all national pretreatment standards and requirements in 40 CFR Parts 406 - 471.
  - c. Provide public notification of significant non-compliance as required by 40 CFR 403.8(f)(2)(vii).
  - d. Pursuant to 40 CFR 403.5(e), when either the Department or the USEPA determines any source contributes pollutants to the POTW in violation of Pretreatment Standards or Requirements the Department or the USEPA shall notify the permittee. Failure by the permittee to commence an appropriate investigation and subsequent enforcement action within 30 days of this notification may result in appropriate enforcement action against the source and permittee.
5. Record keeping. The permittee shall maintain and update, as necessary, records identifying the nature, character, and volume of pollutants contributed by SIUs. Records shall be maintained in accordance with Part II. Section 10.3.a.
6. Staffing. The permittee shall maintain minimum staffing positions committed to implementation of the Industrial Pretreatment Program in accordance with the approved pretreatment program.

- C. SLUDGE DISPOSAL PLAN. The permittee shall notify NYSDEC, and USEPA as long as USEPA remains the approval authority, 60 days prior to any major proposed change in the sludge disposal plan. NYSDEC may require additional pretreatment measures or controls to prevent or abate an interference incident relating to sludge use or disposal.
- D. REPORTING. The permittee shall provide to the offices listed on the Monitoring, Reporting and Recording page of this permit and to the Chief Water Permits and Compliance Branch; USEPA Region II; 290 Broadway; New York, NY 10007; a periodic report, prepared and submitted in accordance with the consistent periodic reporting format established by the Department in the document entitled NYSDEC POTW Periodic Pretreatment Report - 1994, that briefly describes the permittee's program activities over the previous year. This report shall be submitted to the above noted offices within 60 days of the end of the reporting period. The reporting period shall be annual, with reporting period ending on January 31.

The periodic report shall include:

1. Industrial Survey. Updated industrial survey information in accordance with 40 CFR 403.12(I)(1) (including any NYS Industrial Chemical Survey forms updated during the reporting period).
2. Implementation Status. Status of Program Implementation, to include:
  - a. Any interference, upset or permit violations experienced at the POTW directly attributable to industrial users.
  - b. Listing of significant industrial users issued permits.
  - c. Listing of significant industrial users inspected and/or monitored during the previous reporting period and summary of results.
  - d. Listing of significant industrial users notified of promulgated pretreatment standards or applicable local standards who are on compliance schedules. The listing should include for each facility the final date of compliance.
  - e. Summary of POTW monitoring results not already submitted on Discharge Monitoring Reports and toxic loadings from SIU's organized by parameter.
  - f. A summary of additions or deletions to the list of SIUs, with a brief explanation for each deletion.
3. Enforcement Status. Status of enforcement activities to include:
  - a. Listing of significant industrial users in Significant Non-Compliance (as defined by 40 CFR 403.8(f)(2)(vii)) with federal or local pretreatment standards at end of the reporting period.
  - b. Summary of enforcement activities taken against non-complying significant industrial users. The permittee shall provide a copy of the public notice of significant violators as specified in 40 CFR Part 403.8(f)(2)(vii).



## BEST MANAGEMENT PRACTICES FOR COMBINED SEWER OVERFLOWS

The Best Management Practices (BMPs) for Combined Sewer Overflows (CSO) are designed to implement operation & maintenance procedures, utilize the existing treatment facility and collection system to the maximum extent practicable, and implement sewer design, replacement and drainage planning, to maximize pollutant capture and minimize water quality impacts from combined sewer overflows. The BMPs are equivalent to the "Nine Minimum Control (NMC) Measures" required under the USEPA National CSO policy. The NMCs are technology-based CSO control. DEC understands that the Binghamton-Johnson City Joint Treatment Board (Board) is not responsible for the collection system, therefore, only five of the 15 BMPs are included in this permit. The non-applicable BMPs will be placed in the permits of the owners and operators of the CSO satellite communities. Therefore, the Board and the owners must work cooperatively to implement all applicable BMPs in order to comply with the National Policy and the Clean Water Act.

1. CSO Maintenance/Inspection - Not Applicable.
2. Maximum Use of Collection System for Storage - Not Applicable.
3. Industrial Pretreatment - The approved Industrial Pretreatment Program shall consider CSOs in the calculation of local limits for indirect discharges. Discharge of persistent toxics upstream of CSOs will be in accordance with guidance under (NYSDEC Division of Water Technical and Operational Guidance Series (TOGS) 1.3.8 New Discharges to POTWs. For industrial operations characterized by use of batch discharge, consideration shall be given to the feasibility of a schedule of discharge during conditions of no CSO. For industrial discharges characterized by continuous discharge, consideration must be given to the collection system capacity to maximize delivery of waste to the treatment plant. Non-contact cooling water should be excluded from the combined system to the maximum extent practicable. Direct discharges of cooling water must apply for a SPDES permit.

To the maximum extent practicable, consideration shall be given to maximize the capture of industrial waste containing toxic pollutants and this wastewater should be given priority over residential/commercial service areas for capture and treatment by the POTW. For new industry, these factors shall be considered in siting with preference to service by areas not tributary to CSOs or having sufficient capacity to deliver all industrial wastewater during all conditions to the POTW.

4. Maximize Flow to POTW - The Board shall work cooperatively with the satellite facilities to ensure maximum delivery of "first flush" flows to the POTW. The BJC treatment plant shall be capable of receiving the peak design hydraulic loading rates for all process units. The Binghamton-Johnson City Joint treatment plant shall be capable of: receiving a minimum of 60 MGD through the plant headworks; receive and treat a minimum of 60 MGD through the primary clarifiers, carbon filters, nitrogen filters, and disinfection; and receive and treat a minimum of 33 MGD through the denitrification system during wet weather. The collection system and headworks must be capable of delivering these flows during wet weather. If the permittee cannot deliver maximum design flow for treatment, the permittee shall submit a plan and schedule for accomplishing this requirement within 12 months after the effective date of this permit.
5. Wet Weather Operating Plan - The permittee shall maximize treatment during wet weather events. This shall be accomplished by having a wet weather operating plan containing procedures so as to operate unit processes to treat maximum flows while not appreciably diminishing effluent quality or destabilizing treatment upon return to dry weather operation. The wet weather operations plan shall be submitted to the Region 7 Office for review and approval within 12 months after the effective date of this permit.

~~The submission of a wet weather operating plan is a one time requirement that shall be done to the Department's satisfaction once. However, a revised wet weather operating plan must be submitted whenever the POTW and/or sewer collection system is replaced or modified. When this permit is administratively renewed by NYSDEC letter entitled "SPDES NOTICE/RENEWAL APPLICATION/PERMIT", the permittee is not required to repeat the submission. The above due dates are independent from the effective date of the~~

permit stated in the letter of "SPDES NOTICE/RENEWAL APPLICATION/PERMIT".

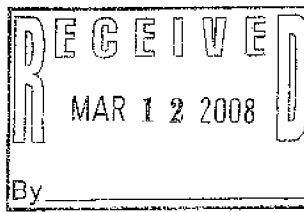
6. Prohibition of Dry Weather Overflow - Not Applicable.
  7. Control of Floatable and Settleable Solids - Not Applicable.
  8. Combined Sewer System Replacement - Not Applicable.
  9. Combined Sewer/Extension - Not Applicable.
  10. Extension of Surcharged Sewer - Not Applicable.
  11. Septage and Hauled Waste - The discharge or release of septage or hauled waste upstream of a CSO is prohibited.
  12. Control of Run-off - Not Applicable.
  13. Public Notification - Not Applicable.
  14. Characterization and Monitoring - Not Applicable.
  15. Annual report - The permittee shall submit an annual report summarizing implementation of the above best management practices (BMPs). The report shall list existing documentation of implementation of the BMPs and shall be submitted by January 31<sup>st</sup> of each year to the offices listed on the Recording, Reporting and Additional Monitoring page of this permit. Examples of recommended documentation of the BMPs are found in Combined Sewer Overflows, Guidance for Nine Minimum Controls, EPA, 1995. The actual documentation shall be stored at a central location and be made available to DEC upon request.
- 

### CSO Long Term Control

CSO Long Term Control Plan (LTCP) is being addressed under the Village of Johnson City, and the Binghamton CSO permits. However, the permittee must work cooperatively with the owners and operators of all tributary municipalities to fulfill the CSO LTCP requirements.

\* \* \* \*





## SCHEDULE OF COMPLIANCE

a) The permittee shall comply with the following schedule.

Action Code	Outfall Number(s)	Compliance Action	Due Date
		The permittee shall develop an approvable plan for monitoring the individual treatment units during the following flow regimes: when flow is less than 35 MGD; when flow is equal to 35 MGD but less than 49.5 MGD; and when flow is greater than 49.5 MGD	
	001	Submit Plan	3 months prior to plant startup
	001	Begin implementation of plan. Monitoring shall be performed a minimum of twice for each flow range during an 18 month period.	60 days after completion of plant startup
	001	Submit two copies of a tabularized report analyzing the result pertaining to the plant and individual unit capacity to the Regional Water Engineer, Region 7.	23 months after completion of plant startup
		The treatability study shall be considered an application for permit modification by this Department. Based on the results of the treatability study, the Department shall develop performance based BAT/BPJ effluent limits for the following parameters: cBOD <sub>5</sub> , Percent Removal; Total Suspended Solids Percent Removal; and Total Nitrogen.	
<p>The above compliance actions are one time requirements. The permittee shall comply with the above compliance actions to the Department's satisfaction once. When this permit is administratively renewed by NYSDEC letter entitled "SPDES NOTICE/RENEWAL APPLICATION/PERMIT", the permittee is not required to repeat the submission. The above due dates are independent from the effective date of the permit stated in the letter of "SPDES NOTICE/RENEWAL APPLICATION/PERMIT."</p>			

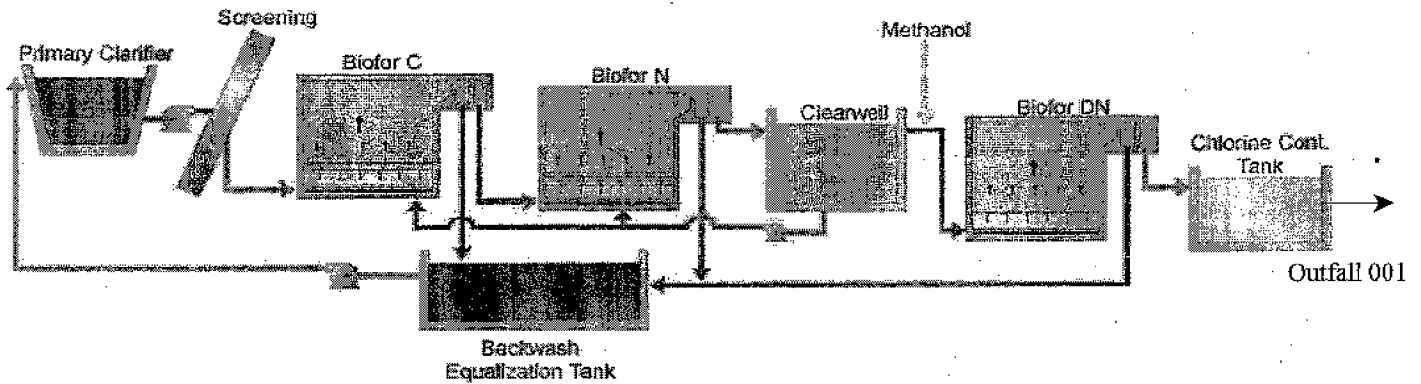
- b) The permittee shall submit a written notice of compliance or non-compliance with each of the above schedule dates no later than 14 days following each elapsed date, unless conditions require more immediate notice under terms of the 6 NYC RR Part 750. All such compliance or non-compliance notification shall be sent to the locations listed under the section of this permit entitled RECORDING, REPORTING AND ADDITIONAL MONITORING REQUIREMENTS. Each notice of non-compliance shall include the following information:
1. A short description of the non-compliance;
  2. A description of any actions taken or proposed by the permittee to comply with the elapsed schedule requirements without further delay and to limit environmental impact associated with the non-compliance;
  3. A description of any factors which tend to explain or mitigate the non-compliance; and
  4. An estimate of the date the permittee will comply with the elapsed schedule requirement and an assessment of the probability that the permittee will meet the next scheduled requirement on time.
- c) The permittee shall submit copies of any document required by the above schedule of compliance to NYSDEC Regional Water Engineer at the location listed under the section of this permit entitled RECORDING, REPORTING AND ADDITIONAL MONITORING REQUIREMENTS and to the Bureau of Water Permits, 625 Broadway, Albany, N.Y. 12233-3505, unless otherwise specified in this permit or in writing by the Department.

**SCHEDULE OF COMPLIANCE**

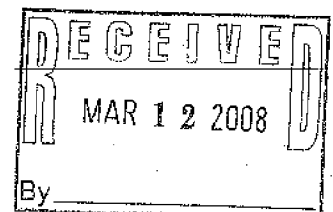
Action Code	Outfall Number(s)	Compliance Action	Due Date
	001	<p><b><u>Pollution Minimization Plan</u></b></p> <p>For Bioaccumulative Chemicals of Concern<sup>1</sup> that are present at detectable levels in the influent of the WPCP (using the most sensitive analytical method in NYSDEC's <u>Analytical Detectability and Quantitation Guidelines for Selected Environmental Parameters</u>), the permittee shall submit an approvable pollutant minimization plan (PMP) which contains a pollutant mass balance and source track down using the EPA <u>Guidance Manual on the Development of Local Discharge Limitations Under the Pretreatment Program</u> as a guideline. The PMP shall include an analysis of potential significant sources (at least 5% of the estimated headworks loading) of the pollutant including industrial and non-industrial sources, non-active hazardous waste sites, storm water runoff, and wet and dry atmospheric deposition.</p> <p>If the PMP identifies controllable sources of the pollutant, it shall include a schedule to reduce the amount of the pollutant to the maximum extent practicable. It is recommended that the PMP examine voluntary source reductions (domestic and non-domestic sources), product substitutions, and other pollutant minimization programs to reduce the pollutant loading to the system, including but not limited to the following examples: household hazardous waste collection, dental and photo processing BMPs, sewer user notification of consequences of disposing toxic substances to the sewer system, and other pollution prevention methods.</p> <p>1. mercury</p>	EDPM ± 18 months

## MONITORING LOCATIONS

The permittee shall take samples and measurements, to comply with the monitoring requirements specified in this permit, at the location(s) specified below:



\* \* \* \*





**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION III  
1650 Arch Street  
Philadelphia, Pennsylvania 19103-2029**

**JUN 11 2010**

Dear PSC Member:

Thank you for your participation at our April 29-30 Principals' Staff Committee meeting. I greatly appreciate your continued commitment to our common mission of protecting and restoring the Chesapeake Bay and local waters.

Although we had to shorten or omit several topics on the agenda, it was important to spend ample time discussing the issues you raised related to completion of the Chesapeake Bay Total Maximum Daily Load (TMDL) and Watershed Implementation Plans. While it is critical to maintain a schedule that moves the entire partnership forward to finalizing a Bay TMDL in December, EPA intends to work in partnership with you to work through issues and develop sound implementation plans. I ask that we continue to stay in close contact and work together to resolve any remaining issues as we move ahead.

We are on the cusp of something truly remarkable as major first-time initiatives, such as the Bay TMDL, President Obama's Executive Order, and our two-year milestone approach, have put us in an unprecedented position to fulfill long-sought goals. The Bay TMDL and the accompanying Watershed Implementation Plans are keys to an enhanced performance and accountability framework to ensure we hit our restoration marks.

I want to take this opportunity to summarize the results of our meeting and subsequent discussions with respect to the Bay TMDL. A significant revision agreed to at our April meeting is the elimination of the requirement for jurisdictions to submit "preliminary" draft Watershed Implementation Plans by June 1 and extending the submittal deadline for the draft plans. The revised schedule now affords the jurisdictions and additional three months – until September 1 – to submit draft plans. In addition, since our April meeting, EPA has agreed to extend the formal public comment period to 45 days (September 24 to November 8), preceded by many other opportunities for open exchange of information with the public and specific stakeholders on the Bay TMDL and the implementation plans.

EPA will continue to work closely with the six watershed states and the District of Columbia as we move forward to meet the joint commitment set by the Principals' Staff Committee and the Executive Council last year to establish the Bay TMDL by December 2010.



*Printed on 100% recycled/recyclable paper with 100% post-consumer fiber and process chlorine free.  
Customer Service Hotline: 1-800-438-2474*

AR0030140



EPA has made adjustments to the process, provided additional financial and technical assistance, offered detailed guidance, responded to state-specific issues and supplied sophisticated scientific data to help all jurisdictions develop strong implementation plans and accelerate on-the-ground actions.

We will continue to take steps to keep our state-federal partnership on track to have all practices in place to restore local waters and the Chesapeake Bay by 2025, with 60 percent in place by the 2017 mid-point mark. Based on our discussions at the April Principals' Staff Committee meeting and additional follow-up conversations with many of you, adjustments have been made to our schedule to provide specific model revisions and to address certain refinements identified by individual jurisdictions. As previously detailed in correspondence to the jurisdictions, EPA expects Phase I implementation plans to include a description of the authorities, actions, and to the extent possible, control measures that will be implemented to achieve point and nonpoint source TMDL allocations. However, plans may be revised by November, 2011 (Phase II), following revisions to the watershed model to address nutrient management effectiveness and suburban land characteristics, and again in 2017 (Phase III). We will also provide an opportunity to review and adjust the models, if necessary, prior to 2017, when final Phase III plans are due. In no case, does EPA anticipate any likelihood of a jurisdiction "over-controlling" between now and 2017 in this first phase of planning and implementation.

The following is EPA's revised three-phase process to ensure that the Bay TMDL is completed by the December 2010 deadline and that all actions necessary for full restoration are implemented on schedule:

- **In 2010:**
  - The model is being closed to any new changes (with the exception of the two agreed upon updates described further in this letter). We will review the suite of Bay models again prior to 2017 and perform a comprehensive assessment with input from all the Bay jurisdictions. Based on that assessment, any additional necessary revisions to the models will be made at that time.
  - On July 1, EPA expects to provide nitrogen and phosphorus allocations to the six watershed states and the District of Columbia by major river basin, and include a temporary reserve for any shift in loads that may occur from the two agreed to Bay watershed model updates (nutrient management effectiveness and suburban land characteristics). On August 15, EPA expects to provide sediment allocations to the six watershed states and the District of Columbia by major river basin.
  - The jurisdictions are expected to complete their draft Phase I Watershed Implementation Plans by September 1 and EPA plans to issue a draft Bay TMDL for a 45-day formal public comment period on September 24, continuing regular outreach on the Bay TMDL that began last fall and continues in 2010.
  - While there is no longer a requirement to provide preliminary Phase I plans by June 1, jurisdictions are strongly urged to share all or a portion of their plans with EPA for feedback prior to September 1. EPA is also hosting a series of



conference calls in which jurisdictions can share approaches with each other for developing the required elements of the implementation plans.

- EPA will provide to the states and the District of Columbia an additional \$200,000 in federal funds for contractor assistance, with a priority on supporting the development of Offset Programs in the jurisdictions. These funds are in addition to significant EPA support funds, totaling nearly \$1 million, provided in the past year to directly help the states establish their Watershed Implementation Plans as well as the \$11.2 million in Chesapeake Bay Regulatory and Accountability Program grant funds being awarded to the states and the District of Columbia.
- The jurisdictions are expected to complete their final Phase I Watershed Implementation Plans no later than November 29. As further detailed in the November 4, 2009 EPA “expectations” letter, the plans will include: 1) source sector distribution; 2) strategies and contingency plans for controlling pollution; 3) plans for tracking and verification; and 4) projections of future actions.
- By December 31, EPA will establish the Bay TMDL and will include final allocations that achieve attainment of all water quality standards as well as interim allocations reflecting the need to have practices in place by 2017 to meet 60 percent of the necessary nutrient and sediment load reductions.

● **In 2011:**

- EPA expects to revise the partnership’s Phase 5.3 Chesapeake Bay Watershed Model with the results of the two agreed upon updates to modify the state-basin nutrient and sediment allocations, and remove or reduce the temporary reserve.
- If the temporary reserve is removed, reduced or the revised model results indicate that allocations should be modified, jurisdictions will work with EPA to determine new Bay TMDL allocations.
- The states and the District of Columbia are expected to submit their draft Phase II Watershed Implementation Plans on June 1 and their final Phase II plans by November 1. The Phase II plans are expected to include finer-scale load distributions as described in EPA’s November 4, 2009 letter and any updates resulting from the Bay watershed model revisions.
- Along with their final Phase II plans, the jurisdictions would also submit for public comment any intention to modify the Bay TMDL allocations.
- EPA anticipates providing state grant funding equivalent to the increased 2010 levels.
- EPA expects to modify the Bay TMDL, if necessary, by December 15.

● **In 2017:**

- Prior to 2017, EPA plans to review the full suite of the partnership’s Bay models based on the best available science and decision-support tools and consider whether updated models should be developed to support Phase III implementation plans and potential modifications to Bay TMDL allocations.
- In 2017, jurisdictions are expected to submit draft Phase III Watershed Implementation Plans by June 1 and final plans by November 1 with a focus on



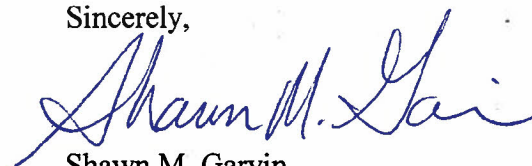
ensuring that all practices are in place by 2025 as needed to fully restore the Bay and its tidal waters.

- EPA expects to modify the Bay TMDL, if necessary, by December 15.

From now until the time that the jurisdictions receive final nutrient and sediment allocations this summer, there are several significant steps that EPA expects the jurisdictions to undertake in the development of their Phase I Watershed Implementation Plans. In order to keep us on schedule to complete the Bay TMDL by the December deadline, the jurisdictions should focus on identifying and filling program gaps, capacity-building, addressing growth and verifying the accuracy of reported practices. Also, given that the level of effort reflected in existing tributary strategies remains close to that needed to meet water quality standards, the states and the District can continue to request multiple “what if” scenarios to evaluate various options for achieving the necessary load reductions. EPA staff stands ready to assist the jurisdictions with this effort.

Working together with all of our partners, we pledge to take the necessary actions to achieve our goals. I look forward to our continued dialogue as we take advantage of this historic opportunity to restore our local waters and the Chesapeake Bay.

Sincerely,



Shawn M. Garvin  
Regional Administrator

